

USAWC STRATEGY RESEARCH PROJECT

**COMBAT SEARCH AND RESCUE: BUILDING  
A JOINT CAPABILITY TO MEET THE COMBATANT  
COMMANDER'S REQUIREMENTS**

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## ABSTRACT

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This paper examines the combat search and rescue (CSAR) mission sub-set of personnel recovery from both a Service and joint perspective, and analyzes its effectiveness in meeting the combatant commander's operational requirements. It reviews the historical significance CSAR has had in past combat operations and the resulting political impacts to campaign strategic objectives. As a framework for analysis, the paper describes joint doctrine and procedures for CSAR command and control, organization, execution, and special mission equipment and considers how each Service is organized to meet these challenging requirements. It argues that CSAR is a complex operation that requires multiservice capabilities and dedicated forces. Finally, it proposes that the current approach of unilateral Service CSAR leads to redundancy of effort, creates competition for high priority resources, and limits interoperability of rescue forces within the joint operational environment. It concludes with recommendations for organizing joint, dedicated CSAR forces for the future.



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## COMBAT SEARCH AND RESCUE: BUILDING A JOINT CAPABILITY TO MEET THE COMBATANT COMMANDER'S REQUIREMENTS

The United States (US) has always placed a significant value on the human dimension of its military. Service members and civilians are the foundation of all American military capabilities, as physical platforms and command and control systems have little asset value to the nation until manned by trained, educated, and motivated people. Providing an adequate level of force protection - from the strategic to the tactical level - is essential to conserving the human element of combat power, and is a fundamental responsibility for a commander's planning and risk management procedures during peacetime and war.<sup>1</sup>

A critical subcomponent of force protection is protecting individuals from capture and imprisonment by a hostile enemy force, as the loss of any service member can significantly impact individual morale and ultimately combat power. Denying adversaries the opportunity to exploit the intelligence and propaganda value of captured personnel can often influence the course of national and international politics, and prevent erosion of a nation's ability to continue with the campaign<sup>2</sup>. The presence of a viable US policy to prevent service members from becoming prisoners of war provides a level of individual morale and trust that results in increased operational performance – and is a policy that the American public demands for the security and well-being of their sons and daughters. To provide this protection, military forces conduct personnel recovery operations to rescue individuals before they become isolated and captured.

This paper will examine the combat search and rescue (CSAR) mission sub-set of personnel recovery from both a Service and joint perspective, and analyze its effectiveness in meeting the combatant commander's operational requirements. It will review the historical significance CSAR has had in past combat operations and the resulting political impacts to campaign strategic objectives. As a framework for analysis, the paper will describe joint doctrine and procedures for CSAR command and control, organization, execution, and special mission equipment and consider how each Service is organized to meet these challenging requirements. It will argue that CSAR is a complex operation that requires multiservice capabilities and dedicated forces. Finally, it will propose that the current approach of unilateral Service CSAR leads to redundancy of effort, creates competition for high priority resources, and limits interoperability of rescue forces within the joint operational environment. I conclude the analysis with recommendations for organizing joint, dedicated CSAR forces for the future.

## **HISTORY AND SIGNIFICANCE OF CSAR**

CSAR became an integral part of military operational capabilities with the advent of large-scale air power during World War II, where the US experienced heavy losses in European Theater bomber and escort aircraft shot down over enemy territory. The Army Air Corps joined efforts with the Royal Air Force in an attempt to organize an air-sea rescue organization – the first demonstration of a US aviation rescue force - but still had little capability to rescue aircrews isolated in enemy territory before capture.<sup>3</sup> This rescue force was reorganized for operations in Korea, but deployed with few assets and an ill defined mission. In spite of an abundance of problems, they were able to build a capability that conducted hundreds of combat saves and participated in evacuating nearly ten thousand United Nations personnel at the end of the Korean War.<sup>4</sup>

During the Viet Nam conflict, the introduction of the helicopter for wide spread use provided for the first time an effective capability to quickly extract downed aircrews before they could be captured. The Air Force organized the Aerospace Rescue and Recovery Service in 1964, which quickly developed new tactics and techniques that made them the most effective combat recovery force to date with over 3,800 personnel rescued.<sup>5</sup> The Army, with the advent of airmobile doctrine, also developed a recovery capability to support their large-scale combat helicopter operations. Although forces were not dedicated solely to this mission, medical evacuation helicopters were extensively used to evacuate wounded (who were at higher risk of capture) from the front lines and to extract helicopter aircrews downed out of the vicinity of friendly forces. This combined service effort was significant, as it demonstrated a successful and effective rescue capability could substantially reduce the risk of conducting air operations and allow air power to be more extensively used in future campaigns.

Despite the proven requirement for a viable CSAR capability, the military drawdown after Viet Nam caused a significant degradation in rescue forces. The Navy transferred all CSAR assets to the Reserve Component, while the Army and Marine Corps determined dedicated CSAR was not required.<sup>6</sup> The Air Force was the only Service to maintain a viable capability with a reorganized Aerial Rescue Service (ARS), until the disaster of Operation Desert One required them to transfer critical assets to the newly formed Air Force Special Operations Command - leaving the conventional Air Force with only seventeen dedicated CSAR aircraft.<sup>7</sup> This lack of a ready and dedicated CSAR capability was acutely felt during Desert Storm, when the ARS did not deploy due to shortfalls in training and equipment readiness. Responsibility for the CSAR mission was delegated to the Joint Forces Air Component Commander (JFACC), supported by

conventional Service assets and special operations forces, who successfully completed rescue missions despite their other primary mission requirements.<sup>8</sup>

CSAR took on a renewed significance in the 1990s as the US initiated greater use of limited objective combat operations. Advanced technologies enabled precision strikes safely out of the reach of conventional enemy weapon systems, a capability that provided strategic leaders with a greater range of military options in situations where the campaign objectives do not warrant significant risk to service members. But even advanced technology weapons systems have some vulnerability, and a CSAR capability became increasingly important to mitigate the low-level of acceptable risk that is quickly exceeded with loss of life or capture of combatants. CSAR not only became an operational requirement, but also a political element of strategic military campaign planning.

Recent limited objective operations, such as the 1998 NATO-led air campaign against Serbia, demonstrated the negative impact that a lack of CSAR capability can have on the strategic policy of a campaign. US and NATO leaders did not consider this situation significant enough to commit ground forces, and instead chose to conduct air strikes on military and civilian targets to achieve their strategic objectives. There were, however, no dedicated CSAR forces available, which significantly limited air planners in the targets they could strike because of the increased risk to aircrews.<sup>9</sup> This situation was repeated again during Operation Enduring Freedom, when the President directed special operations forces operating in conjunction with air strikes as an immediate military response to the attacks in the US. But once again dedicated CSAR forces were not available or rapidly deployable. The President was keenly aware that combatants in this economy of force operation were at high risk of capture, a situation that could devastate the newly launched Global War on Terror. He became personally involved with CSAR risk mitigation, and was ultimately forced to delay operations and limit air targets in this time-sensitive operation until a minimum CSAR capability was in place.<sup>10</sup>

Not only a military requirement, American strategic leaders have also felt the impact that civilian hostages can have on foreign policy and diplomacy - the Iranian Hostage Crisis and failed rescue attempt crippled the presidency of Jimmy Carter, and US hostages held in Lebanon led Ronald Reagan into the Iran-Contra scandal.<sup>11</sup> Undoubtedly influenced by these events, Congress took action by creating in Public Law a requisite level of protection for service individuals. The Missing Person's Act of 1996 and US Code Title 10 dictate the requirement for each service to train and equip forces capable of rescuing individuals before they can be captured, and to return them safely back to their organizations for further duty.<sup>12</sup>

## **REVIEW OF JOINT DOCTRINE AND PROCEDURES FOR CSAR**

A review of joint doctrine is provided as a framework for analysis, along with a description of terms and procedures for organizing and executing recovery missions. For the most part, joint CSAR doctrine is less than 10 years old and based on the 1991 Secretary of Defense Policy Review that reviewed lessons learned from Desert Storm.<sup>13</sup>

Actions taken to recover isolated individuals, or to rescue threatened forces from capture, are defined by the military as personnel recovery. Personnel recovery is the sum of all military, diplomatic, and civil efforts to recover and return US military, Department of Defense (DoD) civilians, and DoD contractor personnel who are isolated or missing while participating in US Government sanctioned activities.<sup>14</sup> It can include hostage negotiations, search operations for missing personnel, rescue or medical evacuation of injured victims, or clandestine operations where specialized teams secure important persons and move them to areas of friendly control. During peacetime or when conducting military operations other than war, commanders organize conventional forces to conduct unopposed search and rescue operations in support of their mission requirements or in support of civilian authorities (when this support does not interfere with military requirements). But during times of conflict or war, commanders must execute the most difficult of all personnel recovery operations - combat search and rescue. CSAR is a recovery operation performed by specially trained and equipped rescue forces, opposed by a credible adversary, to locate and recover isolated personnel threatened by enemy forces.<sup>15</sup>

## **COMMAND AND CONTROL OF JOINT CSAR OPERATIONS**

Although Service components can conduct unilateral CSAR operations on a limited basis, major combat operations require a joint capability to effectively coordinate and synchronize all forces. The requirements for airborne command and control, shared intelligence, clearance of fires, and coordination of battle space can quickly exceed the capabilities of any one component. When this occurs, a joint CSAR capability that requires the efforts of two or more components of the joint force is necessary to accomplish the operation.<sup>16</sup>

The Joint Force Commander (JFC) in any theater or area of operations has the primary authority and responsibility for CSAR in support of US forces.<sup>17</sup> To fulfill this responsibility, JFCs establish a Joint Search and Rescue Center (JSRC) staffed and equipped to plan, coordinate, and execute joint CSAR operations. The JSRC should be operated jointly by personnel from all Services, functional components, and allied/coalition forces within the force, and must be trained and competent in the doctrine and procedures for conducting CSAR. JSRCs during peacetime assist in development of operations plans, standing operating

procedures, reporting procedures, and training of CSAR forces. During combat operations, the JSRC develops air tasking order special instructions (SPINS) specifying theater CSAR guidance, coordinates national, theater, and component intelligence, alerts components of situations involving isolated personnel, and synchronizes and deconflicts joint CSAR operations. The JSRC can be delegated the authority to directly task components to conduct rescue operations within their areas of responsibility (and within their capability) or to support CSAR missions of another component.<sup>18</sup> Although the JSRC may be established within the JFC staff, it is normally delegated to the JFACC and located in the Air Operations Center. This location is ideal for providing situational awareness of isolated personnel (aircrews or ground personnel), communications with other components, connectivity with airborne command and control platforms, and direct input into the air tasking order, air control order, and SPINS. The JSRC is the focal point for all joint CSAR monitoring and coordination, the principle execution control element during rescue operations, and a critical component of the commander's overall force protection plan.

While the JSRC is the overall hub for CSAR operations, the JFC delegates responsibility to conduct actual recovery of personnel to the component commanders who have assigned CSAR-capable assets. To coordinate these CSAR activities, component commanders establish a Rescue Coordination Center (RCC) to coordinate with the JSRC, other component RCCs, and with assigned CSAR forces.<sup>19</sup> The RCC, like the JSRC, relies heavily on trained CSAR personnel who have the capability and experience to plan and control recovery operations. Typical RCC functions are similar to those found in the JSRC, however, RCCs have additional responsibilities that are critical to the conduct of joint CSAR operations – including monitoring the availability and readiness of assigned rescue forces, expediting the collaboration of information, and developing procedures to assist rescue forces in locating isolated persons. RCCs are the component commander's link to integrating rescue forces into the joint command and control structure, and the organization responsible for orchestrating rescue mission execution.

The lowest level of command and control lies with the tactical unit commanders, who prepare to conduct CSAR in support of their own operations or in support of other units. This preparation begins with training and dissemination of information to ensure all subordinate units are familiar with the specific component guidance and procedures for CSAR in their area. CSAR support is also planned concurrently with ongoing combat operations to ensure adequate protection is available for combatants, and must take into account the capabilities and

limitations of adjacent units. When CSAR requirements exceed unit capabilities, the commander forwards these requirements to the RCC for further coordination and action.

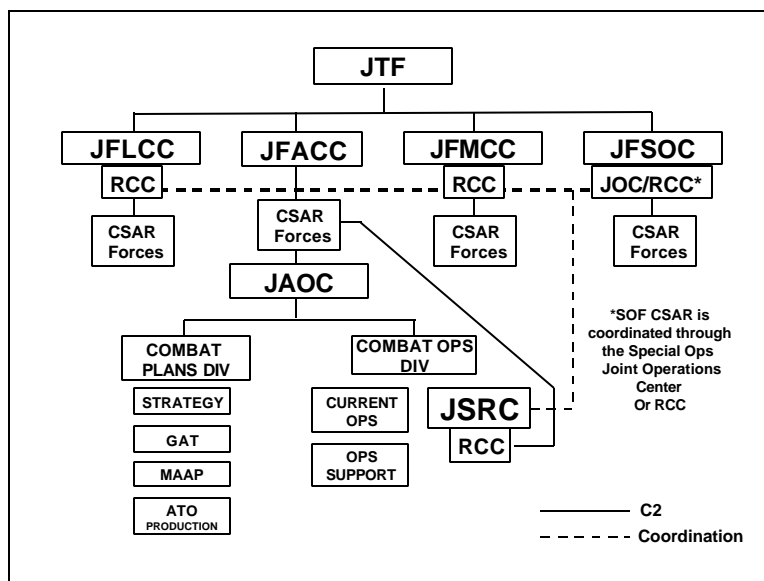


FIGURE 1. CSAR COMMAND AND CONTROL

#### TYPES OF RESCUE FORCES AND MISSIONS

As each Service or functional component organizes rescue forces within their tactical units, mission requirements determine whether they dedicate specific forces to conduct CSAR or provide CSAR coverage on a collateral basis. Dedicated rescue forces are those that are trained and equipped for executing CSAR, are given this mission as their primary responsibility, and remain on alert status ready to respond to a rescue event.<sup>20</sup> When dedicated forces are not organized or available, other forces within the service can provide collateral CSAR support when directed. Commanders assume risk in this type of organization as non-dedicated forces provide support within the constraints of other mission priorities and within the capabilities of their training and equipment.

There are also two types of rescue missions, pre-planned and immediate.<sup>21</sup> Pre-planned missions are characterized by a deliberate process, including analysis of intelligence and survivor locations, detailed mission planning and briefings, and execution selected at the most advantageous time for friendly forces. Pre-planned missions are complex operations, and therefore are typically conducted by dedicated forces that have the capability to plan and

execute these operations. Immediate missions are necessary when personnel are in imminent danger of capture or their survivability is at risk, and the situation requires a rapid and immediate response. The nature of these time-constrained operations may not allow detailed planning or analysis, and rescue forces must execute with limited information that is often provided to them by a command and control element as they are enroute. Immediate missions can be executed by either dedicated or non-dedicated forces, determined by which force is best located to respond within the time available.

One variation of rescue mission types is to embed recovery forces as an integral part of combat formations during the conduct of operations. This provides a capability to immediately recover downed aircrews or other distressed individuals before they become isolated or at risk for capture. This variation is commonly used during Army attack helicopter deep operations, where recovery helicopters accompany attack formations across friendly lines and loiter within their protection range in order to extract aircrews as soon as they are downed.

#### EXECUTION OF JOINT CSAR

As previously stated, joint CSAR is a complex operation that requires the combined assets and efforts of multiple services or organizations. Although joint doctrine states that a single unit operating within itself is the preferred method in conducting rescue missions<sup>22</sup> (due to ease of planning, command, and control), there are rarely times during joint combat operations that the coordination of intelligence and battle space allows such independent operations. In these cases, the formation of a CSAR Task Force is required to fully integrate all the required capabilities to effect recovery.<sup>23</sup>

A joint CSAR Task Force is built around the JFC's dedicated or collateral rescue forces, and then expanded by providing additional force enablers required to command and control operations in a joint battle space. The elements of a joint CSAR Task Force are shown in Figure 2, and are further described in the endnotes.<sup>24</sup>



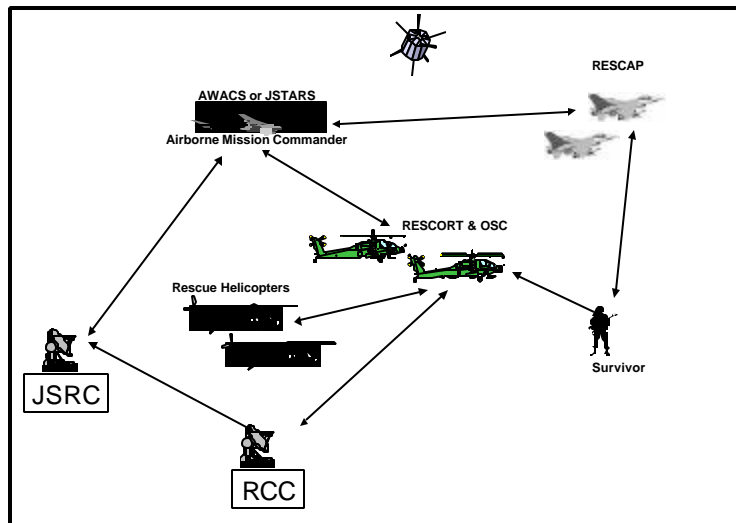


FIGURE 2. CSAR MISSION EXECUTION

A typical scenario for an immediate CSAR Task Force operation begins with a component RCC notifying the JSRC of an isolated person. As information is gathered and the situation is developed, the JSRC notifies all RCCs and tasks the most capable component to conduct the recovery. Once the location and authentication of the survivor is verified and the operation is determined feasible, recovery helicopters with rescue escort (RESCORT) launch towards the objective area.<sup>25</sup> The JSRC also notifies the on-station airborne command and control platform (AWACs or JSTARS) that a recovery mission is underway, and designates this platform as the overall air mission commander (AMC). The AMC then retasks available aircraft in the vicinity to conduct rescue combat air patrol (RESCAP), and directs all non-participating aircraft out of the area. Once the RESCAP arrives over the objective area, they provide initial protection to the survivor from threats in the area, develop the situation, and coordinate activities until the on-scene commander (OSC) and recovery force arrive. As the recovery helicopters are enroute, the AMC provides situational updates, guidance to the objective area, and coordinates for airspace and support requirements while the JSRC and RCCs monitor radio transmissions. The RESCORT then assumes OSC duties when it arrives on the objective, receives updates from the AMC and RESCAP, and directs the recovery helicopters to rescue the survivor once conditions are set.<sup>26</sup> This concept is the same when conducting pre-planned missions, except

that all joint CSAR Task Force forces would be tasked through mission orders and the air tasking order instead of being redirected from ongoing missions.

#### JOINT CSAR SPECIAL MISSION EQUIPMENT

There are three critical elements of the CSAR mission that allow rescue forces to conduct operations as depicted in the above mission scenario: gaining access to the objective area; ensuring survivability of rescue forces; and locating and identifying survivors. Joint forces must have the right tools in the form of special mission equipment in order to quickly find and recover an isolated person before they can be captured.

Access to the objective area is the ability of the rescue force to travel to the survivor's location and return. In order to provide coverage of the entire joint operations area, CSAR forces must be positioned as far forward as possible and able to quickly range hundreds of miles of territory. In many cases CSAR forces must base and operate out of adjoining countries when forward positioning is not possible. This long distance projection requires forces to be rapidly deployable, with equipment that is light and air-deployable on strategic or intra-theater lift assets. Rescue aircraft must also have extended range capabilities, either with auxiliary fuel tanks or aerial refueling equipment, in order to range the required distances.

Survivability of rescue forces is the capability to provide self-protection while in the objective area. Recovery aircraft require advanced missile and radar detectors to defeat enemy air defense systems, and internally mounted weapon systems with increased range and improved stopping power to defeat enemy ground threats. Self-protection is an imminent change to CSAR aircraft as high-speed fighters, such as the F-16 and F-15E, are now being assigned to CSAR protection roles.<sup>27</sup> These fighters operate at altitudes that significantly reduce their ability to suppress enemy close to the vicinity of the objective area, and require CSAR aircraft to move away from the traditional role of being defensively postured to an offensive force capable of collaborative action to fight their way in and out of objective areas.<sup>28</sup>

Finally, CSAR forces must be able to quickly locate and accurately identify survivors in order to reduce vulnerabilities inherent with search operations. To accomplish this, they rely on an advanced information architecture - combining voice, data, and satellite technologies - to communicate directly with the survivor and other members of the CSAR Task Force. Using advanced automated data links, command and control elements can instantly broadcast mission updates to all participating forces while enroute to the area, significantly reducing the time required for pre-mission planning. Next-generation radios can relay survivor position coordinates via satellite, which in turn broadcast the information as an integrated picture directly

to rescue aircraft cockpit multifunctional displays. This information can also be instantly shared with all other joint forces operating in the area, which enhances integration and deconfliction with other on-going conventional missions.

These special mission equipment requirements, however, are a capability that is not readily available in the US military's conventional forces today. They will require all the Services to invest substantial time, effort, and cost in order to standardize and integrate this capability into their existing forces.

## **ASSESSMENT OF SERVICE CSAR CAPABILITIES**

The Services began organizing CSAR forces during World War II - long before the advent of joint doctrine in the 1980's - with each building a capability tailored to meet their individual Service requirements. The relatively new requirement for a joint CSAR capability is clearly evident in the varying approaches each Service has taken in organizing CSAR capabilities.

### **AIR FORCE CSAR CAPABILITIES**

The Air Force clearly leads all the Services in CSAR capabilities, due to their application of individual air power assets across the entire joint battle space. The Air Operations Centers have command, control, and connectivity capabilities that make them ideal to host a JSRC, and routinely include CSAR as a mission function. The Air Force also resources a robust compliment of officers and airman, trained and experienced in recovery operations, to offer expertise in planning, to develop theater SPINS, and to provide liaison for JSRC or component RCC functions. Their rescue forces are organized into dedicated CSAR helicopter units, supported by Service organic assets conducting RESCORT, RESCAP, and air refueling support. They also include pararescue specialists who operate on board recovery helicopters to assist in ground security, move personnel to friendly control, and provide advance medical care.<sup>29</sup> Recent initiatives in Air Force CSAR doctrine and organization will enhance their capabilities even more - as of October 1, 2003, the CSAR mission passed from conventional forces in the Air Combat Command to the Air Force Special Operations Command. This move was directed after Air Force leaders recognized this complex mission was taxing conventional force capabilities, and that placing all rescue assets under one command could enhance unity of effort and avoid duplication.<sup>30</sup> The Air Force has also initiated significant upgrade programs to their recovery helicopters, including the addition of a .50 caliber machine gun, and the development of CSAR data automation and dissemination equipment that allows rescue crews to receive continuous intelligence updates during the entire mission execution window.<sup>31</sup> With

these efforts, the Air Force has developed an efficient and effective capability; however, they do not have sufficient forces to support the entire joint CSAR requirement.

#### NAVAL FORCES CSAR CAPABILITIES

The Navy's primary focus for recovery operations is overwater search and rescue in support of carrier-launched air strike operations, however, they do maintain a limited CSAR capability to recover downed aircrews over land. The officer in tactical command (normally the carrier battle group commander) establishes a Rescue Coordination Team (RCT) as his RCC equivalent to provide the planning, coordination, and control of all combat recovery operations.<sup>32</sup> Each carrier battle group also includes a small dedicated CSAR force within their antisubmarine warfare squadron that maintains trained crews equipped with conventional helicopters that, when supported by Navy fixed-wing RESCORT, are capable of short range rescue in a medium threat environment.<sup>33</sup> Navy RCTs and recovery forces, however, are designed to conduct unilateral recovery of Naval aircrews, and are not widely made available for joint CSAR operations. This leaves the joint force commander responsible for providing support with other CSAR assets for Naval aircraft conducting JFC or JFACC tasked missions.

The Marine Corps conducts combat operations by forming Marine Air-Ground Task Forces (MAGTFs), which are completely self-sufficient organizations consisting of command, aviation, ground, and support components. MAGTFs coordinate and integrate their recovery operations through component command RCCs, and are manned with personnel experienced in the joint air operations environment. MAGTFs are responsible for planning and conducting self-supporting recovery operations through a concept known as Tactical Recovery of Aircraft and Personnel (TRAP), which utilizes conventional forces assigned to recovery missions on a collateral basis when required.<sup>34</sup> This mission differs from CSAR in that it usually does not involve extended air search to locate survivors, but instead conducts pre-planned missions only after survivors and their locations have been confirmed. Although MAGTFs have an unique advantage of including all ground and air recovery assets within a single organization, Marine assault transport helicopters are limited in joint CSAR capability as they are not specifically equipped with the extra armor and defensive armament required.<sup>35</sup> The MAGTF TRAP is designed to conduct unilateral recovery of Marine assets and is not a dedicated CSAR force, but it could provide a credible capability for conducting joint CSAR if it were made available to the joint force commander.

## ARMY CSAR CAPABILITIES

The Army, with its focus on sustained land operations, has the most limited joint CSAR capability of all the Services. Leaders are not well versed in CSAR mission requirements, or in the joint command and control organizations structured to employ them. Training for personnel on the functions and responsibilities of a component RCC are limited, which leaves little expertise to augment the theater JSRC, conduct CSAR planning, or effectively organize a land component RCC. The Army does not maintain dedicated CSAR units or assets with specialized equipment or training, but considers it a secondary mission for all aviation and medical evacuation units.<sup>36</sup> Army CSAR doctrine, by their own assessment, is nearly 20 years old and not compliant with DoD Directives and Instructions.<sup>37</sup> Furthermore, the establishment of a coordinating altitude that delegates low-altitude airspace control to the land component commander inhibits full integration of Army air operations into the JFACC's command and control structure. Army aircraft are not normally TACON to the JFACC (they are placed on the ATO for visibility only), which can lead to confusing command relationships when short-notice recovery missions are executed in the joint air operations area. The Army can conduct immediate or embedded rescue of its own forces and others on a limited basis, but are not fully proficient to conduct operations as part of a joint CSAR Task Force.

## OVERALL ASSESSMENT

Each Service has met its operational force protection and joint mandated requirements to develop a CSAR capability in support of their own combat operations. However, single-Service programming has led to stove-piped approaches in organizations, equipment, and training that do not enhance joint interoperability. Variations in automation, communications, tactics, and procedures inhibit joint force commanders from building CSAR capabilities across the Services - which leads to redundancy of efforts and competition with other higher priorities. The Services are also challenged to resource robust specialized rescue forces, and rely too heavily on conventional forces conducting recovery as a secondary mission. And none of the Services conduct routine and rigorous training together as a joint team in CSAR mission execution. Furthermore, the Services are stretched to fully meet their other personnel recovery responsibilities. CSAR is only one mission requirement; they must also conduct peacetime search and rescue, maintain competent RCC manning, provide Survival, Escape, Resistance, and Evasion training to those in high risk of capture, and resource a repatriation capability to return survivors back to their units. Overall, there are insufficient dedicated CSAR assets

capable of rapidly responding to combat mission requirements and providing the capability combatant commanders need to meet their operational protection obligations.

#### **BUILDING A JOINT CSAR CAPABILITY**

Combatant commanders of joint theaters of operation are responsible for unifying the actions of all the Services to achieve a synergistic application of the military element of national power.<sup>38</sup> They achieve this by synchronizing individual Service forces into more-capable joint forces. Combatant commanders rely on the Services to train and equip forces that are able to rapidly task organize into a joint force, with interoperable equipment and trained personnel that can function in a joint environment. The overall effect is a capabilities-based force that maximizes operational effectiveness and avoids duplication of effort, versus a Service-based force that requires each component to field redundant capabilities in support of itself.

This capabilities philosophy is also applicable to CSAR forces - combatant commanders need Service assets integrated into a joint capability that enhances the overall force. They emphasized this as a deficiency in the most recent Integrated Prioritized List of joint requirements, stating "enhance the combatant commander's ability to plan and execute personnel recovery operations, and the Services' capability to provide well-trained forces with interoperable joint tactics, techniques and procedures, and equipment."<sup>39</sup> Combatant commanders need dedicated CSAR forces with the primary mission of recovering individuals anywhere across the joint area, not forces supporting individual Services limited to their own area of operations. They need recovery aircraft and functional coordination centers that are able to operate effectively within the joint air command and control environment established by the JFACC.<sup>40</sup> CSAR forces need to be forward based or rapidly deployable, with interoperability and a common doctrine that allows a cross-Service task organization that maximizes capabilities. Finally, combatant commanders need a complement of CSAR trained and experienced personnel to conduct planning, liaison with component staffs, and man the JSRC and component RCCs.

Joint air operations are those performed by forces from two or more Services in support of operational or campaign objectives,<sup>41</sup> and CSAR by its very nature will almost always require multiservice capabilities. As an example, the air component commander will normally have organic airborne command and control, RESCORT, RESCAP, and recovery helicopters to conduct recovery operations. But to gain access to aircrews isolated deep in the joint area, they require forward positioning with land component forces or transit through the land component battle space. They also require intelligence from ground forces near the objective area,

clearance of fires and effects, airspace routing when operating below the coordinating altitude, and potentially fuel, logistical, or RESCORT helicopter support. Land component rescue assets have organic RESCORT, but require airborne command and control and RESCAP from air component forces - and by joint doctrine operate under the tactical control of the JFACC while conducting CSAR. Unilateral operations in a joint combat environment can be done, but they do not maximize the capabilities of all the Services.

The primary reason that CSAR needs to be a joint operation is the requirement for a clear chain of command during rescue operations. As previously stated, the JFACC is normally delegated JSRC responsibility (with tasking authority over other components as prescribed by the JFC) and serves as the overall AMC. If unilateral rescue operations are conducted by another component, there is often confusion as to who has authority to direct mission execution, launch rescue aircraft, and provide supporting efforts. Component commanders may assess missions directed by the JSRC as too risky or not feasible, or missions launched unilaterally by a component may not be supportable by other components. CSAR organizations must have a clear chain of command delegated by the JFC, based on the priorities of the joint campaign, from the JSRC down to the lowest level rescue forces.

Finally, the requirement for each Service to resource a unilateral CSAR force results in a redundant capability that competes with limited resources. Specialized equipment is extremely expensive and not standardized, with complex and intensive training requirements that challenge the Services. In some instances, the requirement is only partially met by assigning CSAR as a secondary mission focus. Building a dedicated joint force from across all the Services would ease the burden by portioning the responsibilities, and provide forces that compliment rather than compete against each other.

## **RECOMMENDATIONS**

### **ASSIGN OVERALL CSAR RESPONSIBILITY TO A SINGLE COMMAND**

The current DoD and joint approach of holding each Service responsible for their own CSAR programs is in need of change; what combatant commanders need is a single agency responsible for establishing the direction, standardization, interoperability, and procedures necessary to organize and conduct CSAR operations. The recommended method for building a joint combat recovery capability is for DoD to assign CSAR as a specific mission function to a single Service or unified command. This would establish one command responsible for organizing, equipping, and training all CSAR forces, and provide efficiencies in research and development, procurement, and standardization of recovery capabilities.

The US Special Operations Command (SOCOM) is best qualified to serve in this capacity, as they are a unified command with a large standing headquarters capable of performing the force management, equipment research and development, and unit training development required to build dedicated CSAR forces. SOCOM is organized with forces representing all the Services, which makes them uniquely suited to integrate individual capabilities into joint interoperability. They are experienced in fielding the most capable equipment available from all the Services, and then applying advanced technologies that provide highly specialized capabilities like those required for CSAR missions. They are also responsible for developing doctrine and tactics that integrate complex special mission requirements into conventional joint operations. Given the proper authority, SOCOM would be the ideal candidate to standardize and direct all military CSAR efforts.

A second option for establishing a single responsible command is to assign the US Joint Forces Command (JFCOM) as the lead DoD agency for all CSAR requirements, direction, and standardization. Like SOCOM, JFCOM is a unified command that has a large standing headquarters capable of performing the required functions, and already has many other similar joint integration and doctrinal responsibilities. JFCOM is also currently designated as the DoD executive agent for personnel recovery, less policy, and for coordinating and advancing capabilities within the Services. JFCOM's responsibilities could be expanded in the CSAR mission area of personnel recovery, giving them authority to direct the standardization of rescue force organization, equipment and interoperability, and training readiness across all the Services.

#### ESTABLISH DEDICATED JOINT CSAR FORCES

Combatant commanders need dedicated CSAR forces - specially equipped, trained, and ready to the prescribed standards of a single responsible DoD agency. These forces must be capable of rapidly deploying and operating in the same joint or combined environment as other combat organizations, and be apportioned across all the Services to eliminate redundancy and maximize limited resources. To prevent these forces from becoming another high demand, low density asset, dedicated CSAR forces should only be allocated for the combat phase of operations as conventional forces can provide an adequate search and rescue capability when enemy threats do not significantly oppose recovery operations.

Once again, SOCOM is best qualified to provide combatant commanders with a dedicated CSAR capability. Special operations forces routinely conduct complex operations in a joint environment, and already include personnel recovery as a secondary element of their direct



action mission area.<sup>42</sup> SOCOM has rapidly deployable aircraft from all the Services with highly specialized equipment uniquely capable of conducting CSAR, and are manned by mature, experienced personnel who maintain a high level of proficiency. SOCOM also receives separate DoD funding to meet their specialized mission requirements, a significant advantage in protecting limited resources from competing with other high-priority Service programs. They have the necessary command and control structures at the theater command and joint task force with the Joint Force Special Operations Component Commander or the Joint Special Operations Task Force during combat operations, which includes a robust capability to plan and integrate special operations into the overall air and ground component operating environment. Furthermore, special operations are defined as operations conducted by specially organized, trained, and equipped military forces to achieve objectives by unconventional military means in hostile, denied, or politically sensitive areas<sup>43</sup> – an operational mission area in which CSAR could easily be included.

A second option for establishing dedicated CSAR forces is for DoD to direct each Service to identify, organize, train, and equip a requisite number of dedicated CSAR-capable forces that meet the prescribed standardization requirements. These forces would then be made available for allocation to joint commands during times of conflict. Combatant commander staffs would identify CSAR requirements and necessary dedicated forces in the time phased forces deployment data document as part of their deliberate and crisis action planning, and the Joint Staff would then apportion dedicated CSAR forces against these requirements in the Joint Services Capability Plan. When a crisis arises, the combatant commander staff would request dedicated CSAR forces through the request for forces process, with the Joint Staff identifying and allocating the required force – choosing the most capable from any of the Services. After arriving in theater, dedicated CSAR forces would be positioned by the JFC, operate under tactical control of the JFACC, and be allocated and assigned missions on the daily air tasking order in accordance with the JFC's apportionment guidance.

Consolidating all functions of the CSAR mission area - from lead agency to force provider - under one command is the best option for providing clear direction, streamlining efforts, and enhancing force readiness. SOCOM is the only organization with the necessary force management, command and control, and specially equipped assigned forces to fully meet the combatant commander's requirements - the individual Service approach is too heavily reliant on the Services' abilities to fully comply with the direction set by any lead agency. Special operations forces, however, are already in high demand with limited assets to meet their DoD-wide mission. This option will require significant reprogramming of funds, additional fielding of

aircraft and equipment, and specialized training in order to build a dedicated and ready CSAR force.

## **CONCLUSION**

The combat search and rescue mission area has suffered from neglect for decades, grudgingly accepted by the Services as a necessary but unwelcome resource-consumer. Combatant commanders have stated a requirement for joint integrated capabilities and efforts from all Services, commands, staffs, and forces; but the current focus on individual Service programming does not provide the capability to meet theater force protection obligations. This problem will not fix itself; it will only be resolved with a strong DoD emphasis placed on directing the Services to build CSAR capabilities that are both effective and affordable. CSAR will become increasingly important in the future as the US withdraws forward presence forces, relies on joint fires interdependency, and conducts more operations in asymmetrical environments. The political cost of ignoring this issue much longer may be too high to pay, as failure to field the best possible means to recover isolated persons could significantly undermine future campaigns. As a nation at war, "preserving the life and well-being of our service members and civilians who are placed in harm's way while defending our nation's interests is, and must remain one of our highest priorities."<sup>44</sup>

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## ENDNOTES

<sup>1</sup> Joint Chiefs of Staff, *Universal Joint Task List*, CJCS Memorandum 3500.04C (Washington, D.C.: U.S. Joint Chiefs of Staff, 1 July 2002), D-51.

<sup>2</sup> Department of the Air Force, *Combat Search and Rescue*, Air Force Doctrine Document 2-1.6 (Washington, D.C.: U.S. Department of the Air Force, 15 July 2000), 2.

<sup>3</sup> Ibid. Although there were numerous evasion networks established through resistance groups to aid US aircrews, there was no combat search and rescue capability.

<sup>4</sup> Bryan D. Brown and Victor E. Renuart, *Combat Search and Rescue: A Search for Tomorrow*, Group Study Project (Carlisle Barracks: U.S. Army War College, 20 March 1992), 3.

<sup>5</sup> Air Force Doctrine Document 2-1.6, 2.

<sup>6</sup> J.W. Mullarky, *Combat Search and Rescue – The CINC's Dilemma*, Individual Study Project (Carlisle Barracks: U.S. Army War College, 12 February 1990), 6.

<sup>7</sup> Ibid, 7.

<sup>8</sup> Brown and Renuart, 11.

<sup>9</sup> Adam J. Herbert, "CSAR, Under New Management," *Air Force Magazine* August 2003 [journal on-line]; available from <http://www.afa.org/magazine/aug2003.html>; Internet; accessed 5 November 2003. Although there were no dedicated CSAR forces, special operations forces provided CSAR as a collateral mission.

<sup>10</sup> Bob Woodward, *Bush at War*, (New York, N.Y.: Simon and Schuster, 2002), 158.

<sup>11</sup> Ibid, 152.

<sup>12</sup> Department of Defense, *Accounting for Missing Personnel*, DoD Instruction 2310.5 (Washington, D.C.: U.S. Department of Defense, 31 January 2000) [publication on-line]; available from <http://www.dtic.mil/whs/directives/corres/html/23105.htm>; Internet; accessed 16 February 2004. Additionally, there are 5 Department of Defense Directives (1300.7, 1300.21, 2310.2, 2310.4, 2310.6) and Chairman of the Joint Chiefs of Staff Instruction (3270.01A) that place combatant commanders responsible for planning and executing personnel recovery operations.

<sup>13</sup> Brown and Renuart, 8.

<sup>14</sup> Department of Defense, *Personnel Recovery*, DoD Directive 2310.2 (Washington, D.C.: U.S. Department of Defense, 22 December 2000), 3.1.

<sup>15</sup> Joint Chiefs of Staff, *Dictionary of Military and Associated Terms*, Joint Pub 1-02 (Washington, D.C.: U.S. Joint Chiefs of Staff, 17 December 2003) [publication on-line]; available from <http://www.dtic.mil/jcs/>; Internet; accessed 16 February 2004.

<sup>16</sup> Joint Chiefs of Staff, *Doctrine for Joint Search and Rescue*, Joint Pub 3-50.2 (Washington, D.C.: U.S. Joint Chiefs of Staff, 26 January 1996), I-1.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid, I-2.

<sup>19</sup> Ibid, I-4.

<sup>20</sup> Joint Chiefs of Staff, *Joint Tactics, Techniques, and Procedures for Combat Search and Rescue*, Joint Pub 3-50.21 (Washington, D.C.: U.S. Joint Chiefs of Staff, 23 March 1998), II-12.

<sup>21</sup> Ibid, II-9,10.

<sup>22</sup> Joint Pub 3-50.2, II-6.

<sup>23</sup> Joint Pub 3-50.21, II-6.

<sup>24</sup> Joint Pub 3-50.2, II-7 through 9. The elements of a joint CSAR Task Force include: Airborne Mission Commander (AMC) serves as an extension of the executing component commander's RCC by coordinating all efforts from a forward airborne location. AMC responsibility is typically delegated to the JFACC's command and control platform (AWACs or JSTARs) controlling for the battle space over the isolated person. The AMC provides long-range communications to all CSAR Task Force members, manages the flow of aircraft in the area, coordinates airspace and fires, and advises the JSRC and RCC of mission progress. On-scene Commander (OSC) is the individual designated by the AMC to coordinate all rescue efforts at the rescue site. Recovery helicopters are multiple aircraft that are required to fly to the objective area and execute the recovery. An additional requirement is a ground force on board the helicopters to dismount, authenticate, and assist the survivor. Rescue Escort (RESCORT) are tactical aircraft capable of operating close to the altitude, speed, and endurance of the recovery helicopters to provide protection from surface threats. RESCORT forces are normally designated as OSC. Rescue Combat Air Patrol (RESCAP) is counterair and electronic warfare aircraft assigned to protect rescue forces from airborne and surface threats. They also provide protection for the isolated person until other CSAR Task Force elements arrive in the objective area. Support aircraft are refueling tankers, command and control platforms, or other forces necessary to support operations.

<sup>25</sup> RESCORT is not always provided by armed helicopters. The Air Force also maintains jet aircraft (typically A-10s known as "SANDY") specifically trained and qualified to provide protection enroute and over the objective area.

<sup>26</sup> JP 3-50.2, II-6 through 9.

<sup>27</sup> William B. Scott, "CSAR: Model for Transformation?," *Aviation Week and Space Technology* 11 March 2002 [journal on-line]; available from [http://www.aviationnow.com/avnow/news/channel\\_awst.jsp](http://www.aviationnow.com/avnow/news/channel_awst.jsp); Internet; accessed 5 November 2003.

<sup>28</sup> Ibid.

<sup>29</sup> Air Force Doctrine Document 2-1.6, 12.

<sup>30</sup> Herbert.

<sup>31</sup> Robert Wall, "Rescue Enhancements," *Aviation Week and Space Technology* 16 June 03 [journal on-line]; available from [http://www.aviationnow.com/avnow/news/channel\\_awst.jsp](http://www.aviationnow.com/avnow/news/channel_awst.jsp). Internet; accessed 5 November 2003.

<sup>32</sup> Department of the Navy, *Combat Search and Rescue Manual*, Naval Warfare Publication 3-50.22 (Washington, D.C.: U.S. Department of the Navy, 1 September 1992), 43.

<sup>33</sup> Joint Pub 3-50.2, B-1.

<sup>34</sup> Department of the Navy, *Marine Corps Operations*, Marine Corps Doctrine Publication 1-0 (Washington, D.C.: U.S. Department of the Navy, 27 September 2001), F-19.

<sup>35</sup> Joint Pub 3-50.2, C-1.

<sup>36</sup> The Army's 160<sup>th</sup> Special Operations Aviation Regiment does have aircraft with CSAR-capable equipment, but does not maintain a dedicated CSAR force.

<sup>37</sup> Michael Dozier, "Strategy for Developing Army Personnel Recovery," briefing slides, Washington, D.C., U.S. Army Personnel Recovery Office, 11 November 2003.

<sup>38</sup> Joint Chiefs of Staff, *Doctrine for Joint Operations*, Joint Pub 3-0 (Washington, D.C.: U.S. Joint Chiefs of Staff, 10 September 2001), II-3.

<sup>39</sup> Commander U.S. Special Operations Command Charles R. Holland and Commander U.S. Central Command Tommy R. Franks, "Fiscal Years 2005-2009 Integrated Prioritized Lists," memorandum for Secretaries of Military Departments, Washington, D.C., undated.

<sup>40</sup> Joint Chiefs of Staff, *Command and Control for Joint Air Operations*, Joint Pub 3-30 (Washington, D.C.: U.S. Joint Chiefs of Staff, 5 June 2003), II-2.

<sup>41</sup> Ibid, I-2.

<sup>42</sup> Joint Chiefs of Staff, *Doctrine for Joint Special Operations*, Joint Pub 3-05 (Washington, D.C.: U.S. Joint Chiefs of Staff, 17 April 1998), II-3.

<sup>43</sup> Ibid, II-1.

<sup>44</sup> Air Force Doctrine Document 2-1.6, 1. Quoted from Secretary of Defense William J. Perry in SecDef Memorandum dated 26 January 1996.



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